



# **CITY OF HOUSTON**

## **APPENDIX M**

### **2000 Houston Residential Code**

This appendix is an additional appendix adopted by City Council and is applicable to one and two family dwellings.

This appendix contains the sound attenuation provisions when required by the airport land use ordinance.

*Effective February 1, 2009*

## **APPENDIX M**

### **AIRPORT SOUND ATTENUATION REQUIREMENTS**

#### **SECTION AM101 GENERAL**

**AM101.1 Purpose.** The purpose of this appendix is to set forth sound attenuation specifications for buildings when such sound attenuation is required by Article VI, Chapter 9 of the City Code to achieve an interior sound level of 45dBA.

**AM101.2 Applicability.** These provisions shall apply under circumstances where an airport land use permit is required under Section 9-381 a (2) or (3) of the City Code, and are in addition to other applicable building standards set forth elsewhere in this code.

**AM101.3 Alternate compliance.** Alternative means or methods which equal or exceed the standards set forth in these provisions may be used when approved by the building official in accordance with section R104.9 of this code.

#### **SECTION AM201 DEFINITIONS**

**AM201.1 Definitions.** For purposes of these provisions, the following words shall have the meaning shown herein.

**SOUND TRANSMISSION CLASS (STC).** An integer rating relating to the quality of sound attenuation for building partitions such as walls, ceilings, doors, and windows.

#### **SECTION AM301 WALLS**

**AM301.1 General.** The specific exterior wall assemblies set forth in AM 301.2 and AM301.3 shall include the interior finishes set forth therein.

**Exception:** Exterior wall assemblies or materials that have been tested or listed with a minimum STC rating of 40.

**AM301.2 Brick veneer.** When exterior walls are constructed using brick veneer, a minimum of ½ inch gypsum drywall shall be applied as the interior finish.

**AM301.3 Vinyl or cement sidings.** When exterior walls are constructed using vinyl or cement sidings, a minimum of 5/8 inch gypsum drywall shall be applied as the interior finish.

**AM301.4 Other assemblies and materials.** All other exterior wall assemblies or materials shall have a tested or listed minimum STC rating of 40.

## **SECTION AM401 WINDOWS**

**AM401.1 Windows.** All windows shall have a minimum STC rating of 40 when tested in accordance with ASTM E 90.

**AM401.2 Insulation at windows.** The cavity between the wood framing and the window frame shall be insulated with fiberglass insulation or foam insulation to the depth of the window frame.

## **SECTION AM501 DOORS**

**AM501.1 Doors.** All exterior doors shall have a minimum STC rating of 40 when tested in accordance with ASTM E 90.

**Exception:** An exterior door may have a tested or listed STC rating of less than 40 when installed with a storm door which when combined, achieve a minimum tested or listed STC rating of 40.

## **SECTION AM601 ROOF/CEILING ASSEMBLIES**

**AM601.1 General.** Roof/ceiling assemblies shall be constructed in accordance with the requirements of AM601.2 or AM601.3

**Exception:** Roof/ceiling assemblies or materials that have been tested or listed with a minimum STC rating of 40.

**AM601.2 Ceilings with unconditioned attic space above.** Ceilings with unconditioned attic space shall be insulated with a minimum of ½ inch gypsum drywall on the interior ceiling side covered with a minimum of 12 inches of blown in fiberglass insulation.

**AM601.3 Ceilings without attic space above.** Ceilings without attic space above shall be insulated with a minimum of 5/8 inch gypsum drywall on the interior side filled with a minimum of 9 inches of fiberglass batt insulation with a 1 inch air space between the roof sheathing and the fiberglass.

## **SECTION AM701 MECHANICAL SYSTEMS**

**AM701.1 Required systems.** All heating, ventilation and air conditioning systems shall be central heating and air conditioning systems with ducted supply and return.

**Exception:** A ductless system may be utilized if the system does not require an exterior wall penetration(s).